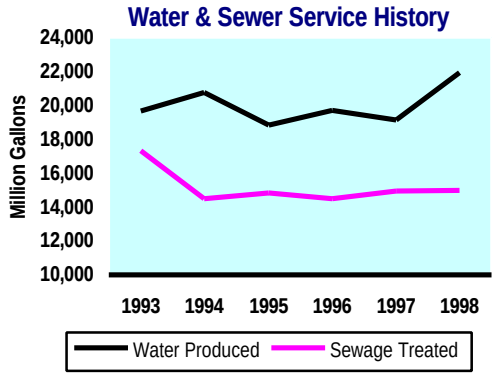
Water & Sewer

Mission. The Water and Sewer Department is dedicated to providing quality, reliable, customer-convenient water and sewer service that represents extraordinary value.

The water treatment plant at Sim Park.

Overview. The Water and Sewer Department supplies and distributes high quality water, and collects and treats wastewater for the City of Wichita. Services include pumping and purifying water, maintaining the water distribution and wastewater collection systems, treating wastewater, managing facilities and planning for future needs, all with the most responsible use of financial resources.

The Water Utility produces, treats, and distributes



approximately 20 billion gallons of water per year for its customers. The Sewer Utility collects and treats approximately 15 billion gallons per year from its customers. Service levels, and water consumption in particular, are driven primarily by system growth rates as well as weather conditions that affect consumption patterns. Despite the large volume of water produced and sewage treated, the Water & Sewer Utilities consistently exceed environmental regulations, often before such regulations are put into effect. This proactive approach assists in planning and helps to ensure that Utility customers receive excellent service value for their money.

The Water Utility provides customers with treated water originating in Cheney Reservoir, the Equus Beds wellfield, and local supply wells. In accordance with state law and the comprehensive water supply plan, the Utility seeks to reduce the amount of water required from groundwater sources (wells) in an attempt to minimize impacts on groundwater supplies. Evidence of the success of this effort can be seen in 1998, when total water usage from the Equus Beds wellfield was the lowest amount used from this source since 1943.

In addition, the Utility is conducting a project to determine the feasibility of withdrawing excess rainfall from the Little Arkansas River during periods of wet weather. The water drawn from the river can then be injected into the aquifer to partially offset Utility withdrawals from the wellfield groundwater supply. In 1998, the project successfully recharged 3 billion gallons of "bank storage" water into the aquifer, and also treated and recharged water taken directly from the river. The project received a Certificate of Recognition as an outstanding 1998 project by the National Groundwater Association, and a 1998 Project Honor Award from the Consulting Engineers Council of Missouri.

The Sewer Utility was recently given a National Pretreatment Excellence Award for its Industrial Pretreatment Program. This award is given to pretreatment programs that have achieved superior industrial compliance levels with wastewater discharge regulations and have implemented innovative mechanisms within the program. Some of the mechanisms used by the program include: a comprehensive inspection program, a biological monitoring program, a combined storm water and industrial monitoring program, and active participation in public education events like the Pretreatment Workshop and Boeing Earth Day Fair.

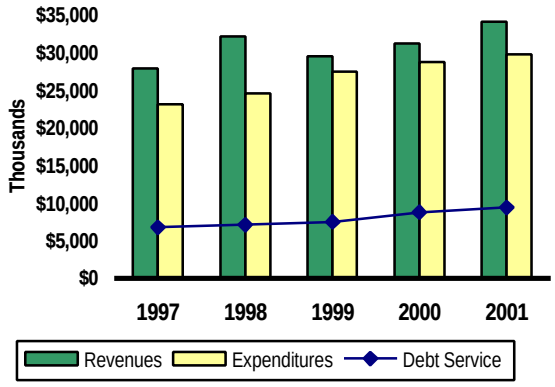
Some in the community have expressed concern about the possibility of a water or sewer plant shutdown resulting from computer date errors on January 1, 2000 (the "Y2K problem"). The City has responded to these concerns with a comprehensive, enterprise-wide Y2K remediation effort.

Finance and Operations. The 1999 and 2000 budgets reflect reductions in operating expenditures compared to previously approved budgets, without decreases in service levels. Reduced salary projections, revised debt service schedules and a redistribution of the relative share of contractual expenses for both Utilities contribute to this decline.

Financial Summary Combined Water & Sewer Revenues (in thousands)			
	1998	**1999**	**2000**
Water Sales Revenue	30,710	26,030	27,720
Sewer Sales Revenue	23,979	22,856	24,320
Interest/Other	2,433	5,648	5,602
Revenue - All Sources	57,122	54,534	57,642

Some of the highest revenue and expenditure totals of the past decade were seen in the Water Utility in 1998. This was related to the relatively hot, dry weather experienced during the summer months. Expenditures increased in line with the cost of treating more water for consumption. However, the expenditure increase was attributable to overtime and material expenses associated with repairs of water main leaks and breaks. The failures were the result of increased stress placed on the distribution system to meet higher consumption demands. These expenditures were more than offset by increased revenue from higher consumption levels.

Water Utility Operations

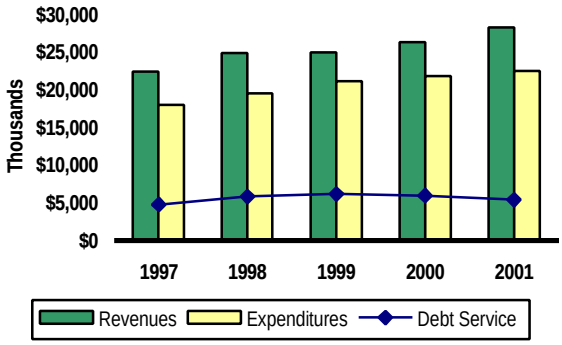


The 1999 Water Utility budget includes substantial expenditures related to the upgrade of the Water and Sewer Laboratory. These upgrades are needed to ensure Year 2000 compliance and to achieve the testing accuracy and reliability necessary to continue meeting environmental regulations.

Several recent initiatives related to improved customer service will be continued in 1999. A new customer information and billing system is scheduled to come online in 1999; this system will be Y2K compliant and will result in maximum flexibility for addressing, processing, customer inquiry and performance needs. The recent addition of an interactive voice response system will also improve customer service by decreasing the amount of time spent on the phone waiting for a service representative. Finally, a new meter reading crew will be added in 1999 to deal with a recent expansion in the number and area of accounts served.

The Water Distribution Division maintains over 1,500 miles of water mains, 28,000 valves, 8,000 fire hydrants, and 150,000 water service lines and meter sets. Over 1,200 main and service line leaks are repaired every year. An ongoing preventive maintenance and inspection effort is underway to prevent leaks and breaks before they occur and require more expensive repair or reconstruction.

Sewer Utility Operations



New service connections average 1,650 per year. Due to a large increase in the number of new service requests in 1998, Water Distribution staff has difficulty meeting all requests for service. In response, the Division will begin contracting out a large portion of new service line installations in 2000, which will provide an efficient and flexible means for addressing the problem.

Wastewater entering the sanitary sewer system receives primary treatment at Sewage Treatment Plant #1 (constructed in 1931) and secondary treatment at Plant #2 (constructed in 1960). The planned Northwest Sewage Treatment Plant will add further capacity. Sewer Utility staff operates and maintains the treatment plants, five odor control injection sites and thirty-four lift stations. In addition, Sewer Utility staff is responsible for cleaning and maintaining approximately 1,450 miles of sanitary sewer laterals, mains, interceptors and manholes. The aim of this activity is to prevent tree roots and other intrusions from blocking or damaging the system and to minimize inflow and infiltration from other sources that increase the volume of sewage reaching the plants, increasing the overall cost of treatment. This preventive maintenance program increases Utility efficiency by addressing problems before they occur, thereby eliminating the need for more expensive maintenance or repair.

The Water Utility budget reflects a Council-approved five percent rate increase in 1999 with planned rate increases of five percent in 2000 and seven percent in 2001. Sewer

Utility revenue projections take into account planned rate increases of five percent annually, in 2000 and 2001. A previously projected Sewer rate increase of five percent for 1999 was deferred due to changing capital requirements. Rate increases are necessary due to increasing Capital Improvement Program expenditures and debt service coverage restrictions in bond covenants. Any future rate changes will be subject to review and approval by the City Council.

Annual Water & Sewer Rate Increases (projected for 2000-2001)

	1999	2000	2001
Water Rate Increases	5%	5%	7%
Sewer Rate Increases	0%	5%	5%

Debt service is the primary variable affecting the rate structure of each utility. Planned rate changes are in accordance with staff recommendations to raise rates moderately in anticipation of large capital expenditures associated with the upcoming Water Supply Plan and the new Northwest Sewage Treatment Plant. Raising rates by smaller amounts a few years before funding needs mature will ensure that capital financing needs can be met without double-digit rate increases.

Because of sound fiscal management and planning for future capacity and financing needs, the Water and Sewer Utilities approach the millennium in an excellent financial position. This not only provides for rate stabilization as new capital needs emerge, but also leads to a higher bond rating given by financial institutions evaluating Utility bonds. A higher bond rating reduces overall debt service costs by reducing the amount of interest at which debt can be issued in any given year. Part of this financial strategy involves financing of capital improvements through cash reserves, which further reduces the cost of improvements by eliminating bond issuance and interest costs.

Bonded Debt Service Coverage Ratio (must equal or exceed 120%, recommended at least 150%)

	1999	2000	2001
Water Rate Increases	224%	208%	174%
Sewer Rate Increases	176%	154%	154%

Revenue bond covenants require that after operating and maintenance expenses, net annual revenues must equal at least 120 percent of the annual debt service payments for principal and interest. This is the bonded debt coverage ratio. A higher ratio provides a cushion against fluctuations in utility revenues (which can be significant given the impact of weather changes on utility revenues). Bond rating agencies and the bond market typically rate utilities as superior if the bond coverage ratio is relatively high.

Water Rate Structure (cost per thousand gallons)

	Inside-City Rate	Outside-City Rate
Block 1 (0-110% AWC)	$0.59	$0.92
Block 2 (111-310% AWC)	$2.12	$3.29
Block 3 (above 310% AWC)	$3.19	$4.95

Water rates are based on a customer's average winter consumption (AWC), which is defined as the mean monthly consumption calculated during the months of December, January, February and March. The AWC is calculated in April and is used as the basis for billings in the ensuing twelve months. The minimum monthly AWC for any metered service on a meter sized at one inch or less is 6,000 gallons. In addition, a minimum monthly charge is assessed for all customers regardless of consumption. The water rate increases as consumption moves up from one block to the next. The AWC rate structure is designed to encourage conservation by imposing a penalty on excessive water usage.

Selected Performance Measures

	1998	1999	2000
Water main breaks per 1,000 miles of water line	729	510	500
Sewer stoppages per 1,000 miles of sewer line	297	292	287

Water Utility Fund Budget Summary

	1998 Actual	1999 Adopted	1999 Revised	2000 Adopted	2001 Approved
Water Utility Fund Revenue	**32,224,641**	**30,101,760**	**29,580,000**	**31,310,000**	**34,160,000**
Personal Services	5,373,314	6,549,790	6,452,790	6,916,560	7,235,230
Contractual Services	6,082,436	6,165,590	6,390,790	6,406,100	6,351,270
Commodities	1,769,427	2,795,300	2,923,980	3,039,760	3,066,150
Capital Outlay	2,180,375	1,272,490	1,480,350	671,460	415,970
Other	9,303,473	11,495,490	10,299,440	11,443,000	12,265,890
Total Water Utility Fund Expenditures	**24,709,025**	**28,278,660**	**27,547,350**	**28,476,880**	**29,334,510**
ADD: Employee Compensation	0	186,460	0	276,830	566,410
Revenue Over (Under) Expenditures	7,515,616	1,636,640	2,032,650	2,556,290	4,259,080
Transfer to Reserves	**7,515,616**	**1,636,640**	**2,032,650**	**2,556,290**	**4,259,080**
Position Summary					
Total full-time	170	177	177	177	177
Total part-time	33	35	37	37	37
Total FTE	191.25	199.75	200.75	200.75	200.75

Sewer Utility Fund Budget Summary

	1998 Actual	1999 Adopted	1999 Revised	2000 Adopted	2001 Approved
Sewer Utility Fund Revenue	**24,896,782**	**25,285,000**	**24,954,000**	**26,332,000**	**28,297,000**
Personal Services	6,381,421	6,796,240	6,680,320	7,182,120	7,566,090
Contractual Services	3,445,171	3,682,420	3,410,130	3,506,950	3,954,110
Commodities	1,401,646	1,809,470	1,862,110	1,874,520	1,909,000
Capital Outlay	642,043	931,250	1,011,020	913,740	979,440
Other	7,628,821	7,907,240	8,212,290	8,053,470	7,513,270
Total Sewer Utility Fund Expenditures	**19,499,102**	**21,126,620**	**21,175,870**	**21,530,800**	**21,921,910**
ADD: Employee Compensation	0	209,170	0	282,450	579,770
Revenue Over (Under) Expenditures	5,397,680	3,949,210	3,778,130	4,518,750	5,795,320
Transfer to Reserves	**5,397,680**	**3,949,210**	**3,778,130**	**4,518,750**	**5,795,320**
Position Summary					
Total full-time	142	142	142	142	142
Total part-time	1	1	1	1	1
Total FTE	142.5	142.5	142.5	142.5	142.5